CLAIMS

1.   (Cancelled).

2.   (Cancelled).

3.   (Cancelled).

4.   (Cancelled).

5.   (Cancelled).

6.   (Cancelled).

7.   (Original)   A method for controlling a controlled process in response to an input signal and a disturbance signal, the method comprising:

predicting a process output to create a predicted process output signal;

generating an error signal based on the input signal and the predicted process output signal;

generating a first control signal based on a disturbance signal and the error signal; and

processing the error signal and the first control signal to generate a process control signal to control the controlled process;

wherein the error signal is generated independently of the first control signal and process control signal.

8.   (Original)   The method of claim 7, wherein generating an error signal based on the input signal and the predicted process output signal comprises generating the error signal in a feedback loop partitioned from the first control signal and the process control signal.

9.   (Original)   The method of claim 7, wherein generating a first control signal based on a disturbance signal and the error signal comprises:

measuring the output of the controlled process affected by a load disturbance; and

subtracting a signal proportional to the output of the controlled process from the input
signal.

10.   (Original)   The method of claim 9, wherein generating an error signal based
on the input signal and the predicted process output signal comprises generating the error signal
in a feedback loop partitioned from the first control signal and the process control signal.

11.   (Original)   The method of claim 7, wherein processing the error signal and the
first control signal to generate a process control signal to control the controlled process
comprises:

generating a first conditioned signal based on the error signal;

generating a second conditioned signal based on the first control signal; and

summing the first and second conditioned signals to generate the process control signal.

12.   (Original)   A method for controlling a controlled process in response to an
input signal and a disturbance signal, the method comprising:

modeling a controlled process and generating a process model signal in a first partitioned
feedback loop;

generating a predicted error signal proportional to the difference between the input signal
and the process model signal;

generating a first control signal proportional to the difference between the predicted error
signal and an output signal proportional to the output of the controlled process and the
disturbance signal in a second partitioned feedback loop;

processing the predicted error signal and the first control signal to generate a process
control signal to control the controlled process;

wherein the first partitioned feedback loop operates independently of the second, partitioned feedback loop.

13.   (Original)   The method of claim 12, wherein processing the predicted error signal and the first control signal to generate a process control signal to control the controlled process comprises:

generating a first conditioned signal based on the predicted error signal;

generating a second conditioned signal based on the first control signal; and

summing the first and second conditioned signals to generate the process control signal.

model and the first controller are configured in a partitioned control loop so that the first controller receives feedback from the process model.